



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

The Glacial Geology of New Jersey, by Rollin D. Salisbury. Volume V of the Final Report of the State Geologist. Trenton, 1902.

This volume may be taken as an illustration of the remarkable advance of glacial geology in recent years. We find 802 pages, with a generous outfit of maps and pictures descriptive of the surface formations of the northern part of a small State—formations which the earlier geologists regarded as a hindrance to their work, which now, however, are recognized as of the greatest meaning to the farmer, builder, engineer, and, indeed, to every thoughtful person. Previous volumes of the Final Report cover Topography, Climate, Magnetism, Mineralogy, Botany, Zoology, Water Supply, and Physical Geography. The geographic features of the State are therefore very broadly and fully treated with the issue of this report on the glacial geology.

A considerable section (226 pp.) is devoted to principles making it possible for a resident of New Jersey to take up the subject without a separate text-book. The principles are, however, developed with especial reference to the State concerned. No question is more common, or harder to answer, than that relating to the thickness of the ancient ice. The author gives a cautious estimate for the north line of the State, that the maximum thickness of the ice

was somewhere between 1,500 and 2,500 feet, and its minimum between 1,000 and 1,500 feet, when the ice was at its maximum stand.

As regards the measure of glacial erosion, Professor Salisbury thinks that hills and ridges were smoothed, but without serious modifications of general configuration. It is recognized, however, that this area lies on and near the glacial boundary, where movement was less powerful and less prolonged. Exceptional erosion, in certain localities, by plucking is noted, as along the Palisades ridge, which the ice crossed to the southeastward, carrying blocks from the top of the cliff to Manhattan, Staten, and Long Islands.

The thickness—or thinness, perhaps, we should say—of the drift points to moderate glacial erosion. Twenty or twenty-five feet is the minimum, and forty or fifty feet a possible maximum thickness, even including the moraine belt. New Jersey was not without its temporary or glacial lakes; and the history of “Lake Passaic” was given several years ago by Dr. H. B. Kümmel, the present State Geologist. This history is repeated in this volume. The section on general principles closes with a history of the glacial period. Part 2, including the rest of the volume, is devoted to

local details. These are presented under the following heads: the Terminal Moraine; the Drift of the Appalachian Province; the Drift of the Highlands; the Drift of the Triassic Plain; Stratified Drift of Late Glacial Age South of the Moraine; and Extra-Morainic Glacial Drift. This extra-morainic drift is referred, doubtfully, to the Kansas epoch. A pocket at the end of the volume contains several maps, among them one showing the direction of glacial movements and one giving the distribution of the glacial drift.

A. P. B.

The New York City Folio, of the Geologic Atlas of the United States.
U. S. Geological Survey, Folio No. 83. Washington, D. C.,
1902.

This folio includes the Paterson, Harlem, Staten Island, and Brooklyn quadrangles of New York and New Jersey, containing more people than any similar area in the New World, the population by the last census being 4,560,800. In plan the work is similar to other Survey Folios giving geological history and resulting geographic features and resources. As with the others, the inside cover pages contain a copious explanation, a kind of key to the terminology and the elaborate maps which are used.

The general geography is described by Richard E. Dodge and Bailey Willis. The drainage features are given in detail in connection with a map, which also shows depths to ten fathoms by contour lines. The geology is given in a series of papers by several authors. The outline of geologic history is by Bailey Willis, and is followed by more detailed accounts of the formation and of the periods to which they belong. Dr. F. J. H. Merrill describes the metamorphic crystalline rocks. Of these the chief representatives are: the Fordham Gneiss, which is pre-Cambrian; the Poughquag Quartzite, which is Cambrian; the Stockbridge Dolomite, a Silurian formation continuing from Western New England; and the Hudson Schist, equivalent to the Berkshire Schist of New England. Various younger rocks are igneous in character, and occur as intrusives in those named above. The Stockbridge Dolomite furnishes the marble of Tuckahoe, and, by the ease of its erosion, has determined along its belts the existence of the now submerged valleys which have made New York what it is.

A much more detailed paper is by Mr. N. H. Darton, and deals with the Jura-Trias, here known as the Newark Group, consisting of reddish brown shales and sandstones, and having, in association